April 14, 1952

Dr. Werner Maas
Tbc Research Lab.
411 E. 69 Street
New York 21, N.Y.

Dear Werner:

I am sorry not to have expressed myself more clearly about the affinities of the Kl and Klt derivatives. That they are derived from the Waksman strain seems now indubitable. They differ from K-12 and share with the latter the following traits: the lysogenic phage characteristic of Waksman, fermentation of sucrose (slow), and according to yourself, resistance to valine. Esther has managed to transfer the Waks. phage to K-12, but only with great difficulty. This will facilitate a determination of the role this phage may play in sterility.

The negative results to which my letter referred were those of crosses of Kl types to K-12. I was repeating your contrast re fertility of Kl with KlT. However, I found so very few prototrophs even in Klt crosses that I could not be objectively certain that their absence in Kl crosses was not simply a sampling error. It was for this reason that I asked you for your details on Klt crosses. I infer that my poor results with Klt-h2-pl etc. do not specifically conflict with your experimental findings. We should find common ground with crossing tests with Klt-p and Klt-h2.

I have not had much more luck crossing the polyauxotrophs to other strains. As I mentioned before, one can get only enough prototrophs to provide barely convincing evidence of crossing. Judging from the appearance of the plates, the Waks. phage may have something to do with this.

If they were already sent, the Klt-p and -h2 should arrive in a day or two. May I thank you in advance.

Sincerely,

Joshua Lederberg